Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-42 (Canceled).

43. (Currently Amended) A communication method, comprising:

(a) providing a representation of an information pattern having a plurality of degrees of freedom;

(b) imposing the information pattern as a set of time domain parameters on a signal[[,]] having at least as many excitation conditions ~~time domain parameters~~ as degrees of freedom of the information pattern, to produce an information communication signal;

(c) transmitting the information communication signal;

(d) receiving the information communication signal; and

(e) demodulating the received information communication signal to determine the set of time domain parameters from a set of respective baseband phase-amplitude responses.

44. (Currently Amended) The communication method according to claim 43, wherein the information communication signal ~~is within a communication band, the~~

~~communication band being separated into~~ comprises a plurality of frequency components ~~subbands~~, each frequency component~~subband~~ being analyzed separately.

45. (Currently Amended) The communication method of claim 44, wherein the demodulating step determines a phase-amplitude response for each respective frequency component~~subband~~.

46. (Currently Amended) The communication method of claim 44, wherein information is communicated over at least two communication channels ~~subbands~~ simultaneously.

47. (Currently Amended) The communication method of claim 44, wherein a number of time domain parameters is less than or equal to a number of frequency components~~subbands~~.

48. (Previously Presented) The communication method according to claim 43, wherein the set of time domain parameters comprises an acoustic reflection pattern.

49. (Previously Presented) The communication method according to claim 43, wherein the set of time domain parameters comprises a set of phase shifts.

50. (Previously Presented) The communication method according to claim 44, wherein the set communication band comprises a frequency band having a center frequency in the range of between about 300 MHz to about 30 GHz.

51. (Previously Presented) The communication method according to claim 44, wherein the set communication band comprises a frequency in a band between about 800 MHz and 1.3 GHz and having a bandwidth of between about 1-3%.

52. (Currently Amended) The communication method according to claim 44, wherein the frequency components~~subbands~~ are generated simultaneously.

53. (Currently Amended) The communication method according to claim 44, wherein the frequency components~~subbands~~ are about evenly spaced across the communication band.

54. (Currently Amended) The communication method according to claim 43, wherein the demodulator comprises a homodyne[[s]] demodulator that is operable to mix the received information communication signal with a demodulation signal, to produce, in a steady state condition, a signal whose amplitude corresponds to a relative phase-amplitude difference between said information communication signal and said demodulation signal.

55. (Previously Presented) The communication method according to claim 43, wherein the demodulator comprises a double balanced mixer.

56. (Currently Amended) The communication method according to claim 43, wherein the set of respective baseband phase-amplitude responses is detected by a low pass filter.

57. (Currently Amended) The communication method according to claim 43, wherein the set of respective baseband phase-amplitude responses is detected by a low pass filter having at least two poles in its transfer function.

58. (Currently Amended) The communication method according to claim 43, wherein the set of respective baseband phase-amplitude responses is represented as a scalar value.

59. (Previously Presented) The communication method according to claim 43, wherein time domain parameters include a maximum significant time constant of less than about 5 μS and comprises a pattern selected from a signal perturbation space having about 16 degrees of freedom.

60. (Previously Presented) The communication method according to claim 43, wherein the demodulator determines self-consistency of received data.

61. (Currently Amended) A communication system, comprising:

(a) an input receiving a representation of an information pattern having a plurality of degrees of freedom;

(b) a modulator ~~for~~ configured to modulate~~ing~~ the information pattern as a set of time domain parameters on a signal[[,]] having at least as many excitation conditions~~time domain parameters~~ as degrees of freedom of the information pattern, to produce an information communication signal;

(c) a demodulator ~~for~~ configured to demodulate~~ing~~ the received information communication signal to determine the set of time domain parameters from a set of respective demodulated baseband phase-amplitude response; and

(d) an analyzer ~~for~~ configured to regenerate~~ing~~ the information pattern.